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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/780,306	02/09/2001	Daniel Pompei Cedrone	1246.1	6764

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SUMMA & ALLAN, P.A.
11610 NORTH COMMUNITY HOUSE ROAD
SUITE 200
CHARLOTTE, NC 28277

EXAMINER

PICKARD, ALISON K

ART UNIT	PAPER NUMBER
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3676

DATE MAILED: 06/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n No.

09/780,306

Applicant(s)

POMPEI, DANIEL

Examiner

Alison K. Pickard

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-39 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____. | 6) <input type="checkbox"/> Other: |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-7, 15-24, and 32-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rhodes (4,697,306) in view of McKinney (1,076,689).

Rhodes discloses a gravity hinge (and gate) comprising an upper cylindrical knuckles 7A having a first surface and an opposing second, oblique surface 28, a lower cylindrical knuckle having a first, oblique surface 24 and a second surface, and a spindle 23. The spindle extends from the first surface of the lower knuckle into a recess in the upper knuckle. The spindle can be integral with the lower knuckle. As seen in Figures 3 and 4, the knuckles are oblique across their entire surface. Rhodes discloses the hinge can be used with a gate or fence. Rhodes does not disclose a bushing that separates the upper and lower knuckles. McKinney teaches using a bushing to separate upper and lower knuckles of a hinge. The bushing 10 is made of a hard material and has a lubricating property that reduces friction. McKinney teaches that the bushing reduces wear, noise, and friction between the knuckles. McKinney teaches using the bushing to alleviate the need for lubricant. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the hinge of Rhodes by using a bushing between knuckles as taught by Rhodes to reduce friction, wear, and noise without the use of lubrication.

Regarding the requirement for an “oblique” bushing such that the bushing and knuckles form a continuous cylinder, it appears that Rhodes in view of McKinney would produce the claimed invention. McKinney teaches a bushing that is shaped to continuously contact the adjacent knuckle surfaces to form a continuous cylinder. Since the surfaces of Rhodes’s knuckles are oblique, it seems inherent the bushing would be too. However, McKinney does not specifically teach an oblique bushing. Toedt teaches using an oblique bushing between oblique knuckle surfaces in a gravity hinge. Toedt teaches that the bushing is formed correspondingly to the oblique surfaces of the knuckles to provide a bearing surface for the knuckles. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the bushing of McKinney by making it oblique to mate with and provide bearing surfaces for the oblique knuckle surfaces as taught by Toedt such that a continuous cylinder is formed in the resting position.

Regarding claims 4, 5, 7, 21, 22, and 24, Rhodes does not disclose that the lower knuckle has a recess for receiving the spindle. It is known in the art to make the hinge of 2 (i.e. the spindle integral with one of the knuckles) or 3 (i.e. two knuckles and a spindle) components as evidenced by Fletcher, Suska, Rodler, Booraem, Matyas, and Foltz (for example). Making the knuckle into separable parts (i.e. a spindle and hollow knuckle) is considered a design choice. See *In re Dulberg*, 129 USPQ 348, 349 (CCPA 1961). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the hinge such that the spindle is separate from the lower knuckle as such is a design choice known in the art.

Regarding claims 6 and 23, the spindle is considered integral with the upper knuckle in that it is connected to form one piece.

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3. Claims 8, 9, 25, 26, and 37-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rhodes in view of McKinney in view of Toedt as applied to claim 1 (17 and 33) above, and further in view of Suska.

Neither McKinney nor Toedt disclose the bushing is made of a polymer. Suska teaches using a plastic bushing instead of metal bushings in hinges. Suska teaches that plastic bearings are longer lasting, non-corrosive, smoother, and quieter (see col. 1, lines 18-53). Suska teaches the bushing can be made of a polymer or can have a coating (laminate, col. 5, lines 23-27). Regarding claims 38 and 39, Suska also teaches making the bushing with a cylindrical sleeve that is received within at least one of the knuckles to provide radial support as well as to seal dirt from entering the knuckles. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the bushing by making it of a polymer or with a coating (and with the sleeve) as taught by Suska to provide a longer lasting, non-corrosive, smoother and quieter bushing (that has radial support and seals dirt from entering the knuckles).

4. Claims 10, 11, 27, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rhodes in view of McKinney in view of Toedt as applied to claim 1 (and 17) above, and further in view of Douglas (3,733,650).

Neither McKinney nor Toedt disclose a bushing having a cylindrical sleeve received in at least one of the knuckles. Douglas teaches a hinge comprising upper and lower knuckles, a spindle, and a bushing. The bushing comprises a sleeve that is received within the lower knuckle. Douglas teaches the sleeve is used to prevent friction and allow the spindle to rotate smoothly. Therefore, it would have been obvious for one of ordinary skill in the art at the time

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the invention was made the bushing with the sleeve as taught by Douglas to prevent contact between the knuckle and spindle while allowing the spindle to rotate smoothly.

5. Claims 12-14 and 29-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rhodes in view of McKinney in view of Toedt as applied to claim 1 (and 17) above, and further in view of Gidseg (4,864,691).

Rhodes does not disclose the material of the knuckles. Gidseg teaches are equivalent materials for hinge knuckles (col. 11, lines 32-42). Gidseg teaches metal, polymers, and ceramics, as being equivalent materials for hinges. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to make the knuckles out of metal, ceramic, or polymers as such are suitable materials for hinges as taught by Gidseg.

Response to Arguments

6. Applicant's arguments filed 4-8-03 have been fully considered but they are not persuasive and are moot in view of the new ground(s) of rejection.

Rhodes in view of McKinney (in view of Toedt) discloses a hinge "consisting essentially of" the limitations required by the claims. Applicant argues (in paper 8) that Rhodes' hinge is more complicated than the claimed invention because of cap 34 (and pin and screw). Rhodes states that a cap "may be provided," which indicates it's optional. Regardless, the addition of the cap is not viewed to "materially affect the basic and novel characteristic(s)" of the claimed invention. See *In re Herz*, 537 F.2d 549, 551-52, 190 USPQ 461, 463 (CCPA 1976). Forming a hinge without a cap and securing pin is not novel as evidenced (at least) by Rhodes' Figure 5. Note: Toedt also disclose that a hinge without a securing pin and cap is known in the art. As for the

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lubricating hole (36), one of ordinary skill in the art would know to modify Rhodes with a bushing (taught by, at least, McKinney and Toedt) to eliminate the need for lubrication.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alison K. Pickard whose telephone number is 703-305-0882. The examiner can normally be reached on M-F (9-6:30), with alternate Friday's off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Knight can be reached on 703-308-3179. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9326 for regular communications and 703-872-9327 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 308-1113.

A handwritten signature in black ink, appearing to read 'Anthony Knight', is written over the printed name.

Anthony Knight
SPE
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AP
June 14, 2003